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Inline power-level terminal blocks, electronic direct starter, up to 3.7 kW / 400 V AC



#### Product description

INTERBUS Inline power-level terminals enable standard three-phase motors to be switched, protected, and monitored via INTERBUS. The terminals in the product range are available as direct and reversing starters in electronic and electromechanical versions. Each power-level terminal is equipped with electronic motor protection and provides the same advantages as the INTERBUS motor starter, such as motor current monitoring, overcurrent protection, and quick shutdown according to IEC. The integrated controller supports motor current parameterization via INTERBUS in the performance ranges from 15 W to 1.5 kW and 0.1 kW to 3.7 kW. As with all Inline automation terminals, the power-level terminals can be snapped on and mounted on a DIN rail without tools.

Labeling is carried out directly on the module using the familiar zack marker strip and a snap-on label with large-surface labeling option. Additional features include:

- Mains voltage up to 400 V AC 3~
- Mains output power: electronic: 15 W to 1.5 kW, electromechanical version: 0.1 kW to 3.7 kW
- Manual local operation without bus supported
- Can be extended with brake function as an option
- Thermal motor monitoring using Inline thermistor terminal

#### **Product Features**

- ☑ Connection option for an external passive brake module
- Mand-held operator panel mode
- Integrated electronic motor protection in accordance with IEC 60947-4
- Safe isolation between mains voltage and 24 V supply voltage according to EN 50178
- Diagnostic and status indicators
- Motor control via OUT process data
- Motor current monitoring

### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	680.0 GRM
Custom tariff number	85389091
Country of origin	Germany

### Technical data

Note



### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area	
Dimensions		
Width	63 mm	
Height	224 mm	
Depth	109 mm	
Ambient conditions		
Ambient temperature (operation)	-25 °C 55 °C	
Ambient temperature (storage/transport)	-25 °C 85 °C	
Permissible humidity (operation)	75 % 85 % (75% average, 85% seldom)	
Permissible humidity (storage/transport)	75 % 85 % (75% average, 85% seldom)	
Air pressure (operation)	70 kPa 106 kPa (up to 3000 m above mean sea level)	
Air pressure (storage/transport)	70 kPa 106 kPa (up to 3000 m above mean sea level)	
Degree of protection	IP20	
nterfaces		
Fieldbus system	Lokalbus	
Designation	Inline local bus	
Connection method	Inline data jumper	
Transmission speed	500 kBit/s	
Transmission physics	Copper	
Power supply for module electronics		
Connection method	Through the potential jumper	
Designation	Terminal strips X11 and X12	
Mains connection		
Designation	Mains connection	
Connection method	Power connector or power bridge	
Designation connection point	Terminal strip; X11 and X12	
Number of positions	5	
Permissible conductor cross section	max. 2.5 mm <sup>2</sup> (L1+L2+L3+N-PE)	
Operating voltage	187 V AC 500 V AC +0 % (conductor voltage)	
Max. current carrying capacity	20 A	

### Motor starter, output

Connection method	(3-phase), via COMBICON
Number	1



# Inline terminal - IB IL 400 MLR 1-8A - 2727365

### Technical data

#### Motor starter, output

Output name	Motor outputs (three phases), short-circuit-proof with external line protection fuse 20 A
Designation connection point	Terminal strip; X10
Number of positions	4
Permissible conductor cross section	1 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Operating voltage	200 V AC 600 V AC +0 %
Frequency range	50 Hz 60 Hz
Nominal current range	0.2 A 8 A
Switching rate	Max. 5 cycles per minute
Motor monitoring	
Parameterization range	0.2 A 8 A (steps of 50/100/200 mA, via fieldbus)
Overspeed tripping	$\geq$ 40 A (after 0.3 seconds)
Thermistor input	
Number of inputs	2
Inline potentials	
Communications power U <sub>L</sub>	7.5 V
Current consumption from UL	max. 45 mA
Segment supply voltage Us	24 V DC (nominal value)
Current consumption from Us	max. 160 mA
General	· · ·
Weight	550 g
Note on weight specifications	Without plug
Mounting type	DIN rail
Protection class	I, IEC 61140, EN 61140, VDE 0140-1
Note	Notes on operation Line protection for the network supply line, max. 20 A. Observe derating of the POWER-COMBICON connector
Test section	Supply voltage UL/400 V level 1.2 kV AC 50 Hz 1 min
	Supply voltage US/400 V level 1.2 kV AC 50 Hz 1 min
	Supply voltage US/brake control switch 1.2 kV AC 50 Hz 1 min
	Supply voltage UL/brake control switch 1.2 kV AC 50 Hz 1 min
	Remote bus/400 V level 1.2 kV AC 50 Hz 1 min
	Remote bus/Brake control switch 1.2 kV AC 50 Hz 1 min
Conformance with EMC directives	Test for immunity to interference in acc. with EN 50082-2:1995 Discharge of electrostatic electricity (ESD) EN 61000-4-2:1995/IEC 61000-4-2 6 kV contact discharge, criterion B; 8 kV air discharge, criterion B
	Electromagnetic fields EN 61000-4-3:1993/IEC 61000-4-3 Criterion A; field strength: 3 V/m

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### Technical data

### General

	Fast transients (Burst) EN 61000-4-4:1995/IEC 61000-4-4 Criterion B; Supply lines: 2 kV; Signal/data lines: 2 kV
	Transient surge voltage (Surge) EN 61000-4-5:1995/IEC 61000-4-5 Criterion B; supply lines DC: 0.5 kV/0.5 kV (symm./asymm.); criterion B; supply lines AC: 2 kV/4 kV (symm./asymm.)
	Conducted interference EN 61000-4-6:1993/IEC 61000-4-6 Criterion A; Test voltage 10 V
Noise emission	Test of emitted interference, housing, in acc. with EN 50081-2:1993 EN 55011:1991 class A
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 1g, evaluation criterion 1
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 10g, evaluation criterion 1
Diagnostics messages	Overcurrent Error message in the diagnostic code (bus) and display via the LED ERR on the module
	Output stage cannot be controlled Error message in the diagnostic code (bus) and display via the LED ERR on the module
	Module error during self test Message to the master

### Classifications

eCl@ss

eCl@ss 4.0	27250309
eCl@ss 4.1	27250309
eCl@ss 5.0	27250304
eCl@ss 5.1	27242609
eCl@ss 6.0	27242609
eCl@ss 7.0	27242609
eCl@ss 8.0	27242609

#### ETIM

ETIM 2.0	EC001433
ETIM 3.0	EC001601
ETIM 4.0	EC001601
ETIM 5.0	EC001605

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404



# Classifications UNSPSC UNSPSC 13.2 43201404 Approvals Approvals Approvals UL Listed / GOST / cUL Listed / cULus Listed Ex Approvals Approvals submitted Approval details UL Listed 🛞 GOST 🙆 cUL Listed 🖤 cULus Listed

Drawings



Connection diagram

Dimensioned drawing





Block diagram



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